

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An image forming apparatus including a system service for performing processes of a system side of the image forming apparatus on the basis of a request by using an API from an application for performing processes on image forming, the image forming apparatus comprising:

an obtaining unit configured to obtain version information of a plurality of APIs used by the application for the system service, and version information of a plurality of APIs corresponding to the system service;

a comparing unit configured to compare, API by API, version information of the one of the plurality of the APIs used by the application with version information of the one of the plurality of the APIs of the system service; [[and]]

a further comparing unit configured to compare a version of a set of the APIs used by the application with a version of a set of APIs of the system service; and

control services configured to control hardware resources of the image forming apparatus, and a virtual application service that operates as a client process for at least a control service, and operates as a server process for the application, wherein the image forming apparatus performs comparison by the comparing unit only when the versions of the sets of the APIs are different, and the system service includes at least a control service that receives a request by using an API from the application, and the virtual application service.

Claim 2 (Canceled).

Claim 3 (Previously Presented): The image forming apparatus as claimed in claim 1, wherein an executive program of the application includes the version information of the APIs

used by the application, and the obtaining unit obtains the version information of the APIs used by the application from the application.

Claim 4 (Original): The image forming apparatus as claimed in claim 3, wherein the image forming apparatus tentatively launches the application for obtaining the version information from the application.

Claim 5 (Previously Presented): The image forming apparatus as claimed in claim 3, wherein the system service includes a plurality of system service modules, the application includes version information of APIs used by the application for each of the system service modules, when the obtaining unit obtains version information of APIs corresponding to a system service module from the application, the obtaining unit obtains version information of APIs of the system service module from the system service module.

Claim 6 (Previously Presented): The image forming apparatus as claimed in claim 1, further comprising:

a file stored in memory, including the version information of the APIs used by the application, wherein the obtaining unit obtains the version information of the APIs used by the application from the file.

Claim 7 (Previously Presented): The image forming apparatus as claimed in claim 1, wherein, when the comparing unit compares the versions before the application is installed, the image forming apparatus displays on an operation panel information indicating that the application can be installed if all versions of the APIs used by the application are the same as versions of corresponding APIs of the system service.

Claim 8 (Canceled).

Claim 9 (Currently Amended): The image forming apparatus as claimed in claim 1 [[8]], wherein the virtual application service includes the obtaining unit and the comparing unit.

Claim 10 (Currently Amended): An API version check method performed by an image forming apparatus including a system service for performing processes of a system side of the image forming apparatus on the basis of a request by using an API from an application for performing processes on image forming, the method comprising:

obtaining version information of APIs used by the application for the system service, and version information of APIs of the system service;

comparing, API by API, versions of the APIs used by the application with versions of the APIs of the system service; [[and]]

comparing a version of a set of the APIs used by the application with a version of a set of APIs of the system service; and

a plurality of control service units configured to control hardware resources of the image forming apparatus, and a virtual application service that operates as a client process for at least a control service, and operates as a server process for the application, wherein the image forming apparatus performs a comparison, API by API, only when the versions of the sets of the APIs are different, and the system service includes at least a control service that receives a request by using an API from the application, and the virtual application service.

Claim 11 (Canceled).

Claim 12 (Original): The method as claimed in claim 10, wherein an executive program of the application includes the version information of the APIs used by the application, and wherein the version information of the APIs used by the application is obtained from the application.

Claim 13 (Original): The method as claimed in claim 12, wherein the image forming apparatus tentatively launches the application for obtaining the version information from the application.

Claim 14 (Previously Presented): The method as claimed in claim 12, wherein the system service includes a plurality of system service modules, the application includes version information of APIs used by the application for each of the system service modules, further comprising:

obtaining version information of APIs corresponding to a system service module from the application, and obtaining version information of APIs of the system service module from the system service module.

Claim 15 (Previously Presented): The method as claimed in claim 10, further comprising:

a file stored in memory, including the version information of the APIs used by the application, wherein the version information of the APIs used by the application is obtained from the file.

Claim 16 (Original): The method as claimed in claim 10, wherein, when the versions are compared before the application is installed, the image forming apparatus displays on an operation panel information indicating that the application can be installed if all versions of the APIs used by the application are the same as versions of corresponding APIs of the system service.

Claim 17 (Canceled).

Claim 18 (Currently Amended): The method as claimed in claim 10 [[17]], wherein the virtual application service performs the obtaining and the comparing.

Claim 19 (Currently Amended): A computer readable medium encoding a program containing instructions, which when executed causes an image forming apparatus to execute a version check process, wherein the image forming apparatus includes a system service for performing processes of a system side of the image forming apparatus on the basis of a request by using an API from an application for performing processes on image forming, comprising:

obtaining program code means for obtaining version information of APIs used by the application for the system service, and version information of APIs of the system service;

comparing program code means for comparing, API by API, versions of the APIs used by the application with versions of the APIs of the system service; [[and]]

program code means for comparing a version of a set of the APIs used by the application with a version of a set of APIs of the system service; and

means for controlling hardware resources of the image forming apparatus, and a virtual application service that operates as a client process for at least a control service, and

operates as a server process for the application, wherein the comparing program code means performs comparison, API by API, only when the versions of the sets of the APIs are different,

the system service includes at least a control service that receives a request by using an API from the application, and the virtual application service, and

the image forming apparatus includes an application for performing processes on image forming, and a system service for performing processes of a system side of the image forming apparatus on the basis of a request by using an API from the application.

Claim 20 (Canceled).

Claim 21 (Previously Presented): The computer readable medium as claimed in claim 19, wherein an executive program of the application includes the version information of the APIs used by the application, and the obtaining program code means obtains the version information of the APIs used by the application from the application.

Claim 22 (Previously Presented): The computer readable medium as claimed in claim 19, wherein the image forming apparatus includes a file stored in memory, including the version information of the APIs used by the application, and the obtaining program code means obtains the version information of the APIs used by the application from the file.

Claim 23 (Previously Presented): The computer readable medium as claimed in claim 19, wherein, when the comparing program code means compares the versions before the application is installed, the computer program further includes program code means for causing the image forming apparatus to display on an operation panel information indicating

that the application can be installed if all versions of the APIs used by the application are the same as versions of corresponding APIs of the system service.

Claims 24-52 (Canceled).